Product Carbon Footprint for dthpkoqpii

Company: dguowujiwi • Standard: GHG Protocol • Production Country: China
Generated: May 25, 2026

47.81 kgCO2e
TOTAL FOOTPRINT

TOTAL FOOTPRINT

47.81 kgCO2e

per 1.0 unit

CARBON INTENSITY

47.81 kgCO2e

per unit

TOP MATERIAL HOTSPOT

Aluminum Casing

12.0 kgCO2e

PRIMARY EMISSION SCOPE

Scope 3

Value Chain Emissions

Lifecycle Stage Breakdown

Use Phase	29.00 kgCO2e (57.56%)
Material Acquisition & Processing	20.50 kgCO2e (40.69%)
Manufacturing	0.67 kgCO2e (1.33%)
Transportation	0.21 kgCO2e (0.42%)
End-of-Life Treatment (Credit)	-2.57 kgCO2e

Material Carbon Impact

Aluminum Casing	12.0 kgCO2e (58.54%)
Circuit Board	4.0 kgCO2e (19.51%)
ABS Plastic Shell	3.6 kgCO2e (17.56%)
Copper Wire	0.6 kgCO2e (2.93%)
Cardboard Packaging	0.3 kgCO2e (1.46%)

Key Highlights

- **Use Phase Dominance:** The product's energy consumption during its 5-year lifespan is the largest emission hotspot, accounting for 29.00 kgCO2e.
- **Material Impact:** Raw material acquisition, notably Aluminum Casing and Circuit Boards, is the second major contributor at 20.50 kgCO2e.
- **Circularity Benefits:** High recyclability (70%) and active take-back programs result in a net carbon credit of -2.57 kgCO2e at End-of-Life.

Recommendations for Emission Reduction

- **Enhance Use Phase Efficiency:** Optimize product design for lower energy consumption and explore renewable energy integration for end-users.
- **Sustainable Material Sourcing:** Investigate and switch to lower-carbon alternatives for high-impact materials like Aluminum and Circuit Boards.
- **Optimize Logistics:** Implement strategies to reduce transport distances and shift to more energy-efficient modes across the supply chain.
- **Strengthen Circularity:** Expand take-back programs to include repair, refurbishment, or remanufacturing options to extend product lifespan.